

# Water Supply

4-28-2008

## Envision 2040

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- Issue # 1 ~ Water Supply Outlook
- Issue # 2 ~ Water Conservation
- Issue # 3 ~ Recycled Water

## Issue #1

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Water Supply Outlook

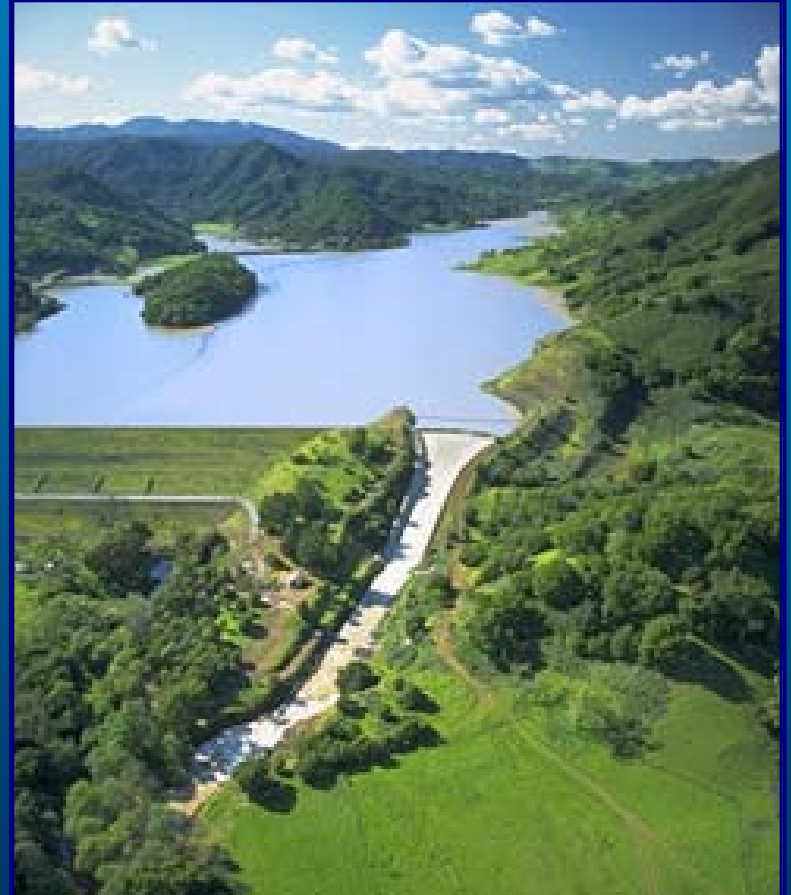
# Our diverse water supply portfolio



*imported Sierra water*



*recycled water*



*local reservoirs and  
groundwater*

# We tap 3 imported water systems

*Lake Oroville water ...*



## 1 State Water Project (since 1965)

*travels in South Bay Aqueduct*



*... to SCVWD plant*



Photo courtesy of California Department of Water Resources



# We tap 3 imported water systems

*Shasta Lake & other federal water ...*



## 2 Federal Central Valley Project (since 1987)

Photo courtesy of US Bureau of Reclamation

*... travels in Delta-Mendota Canal ...*

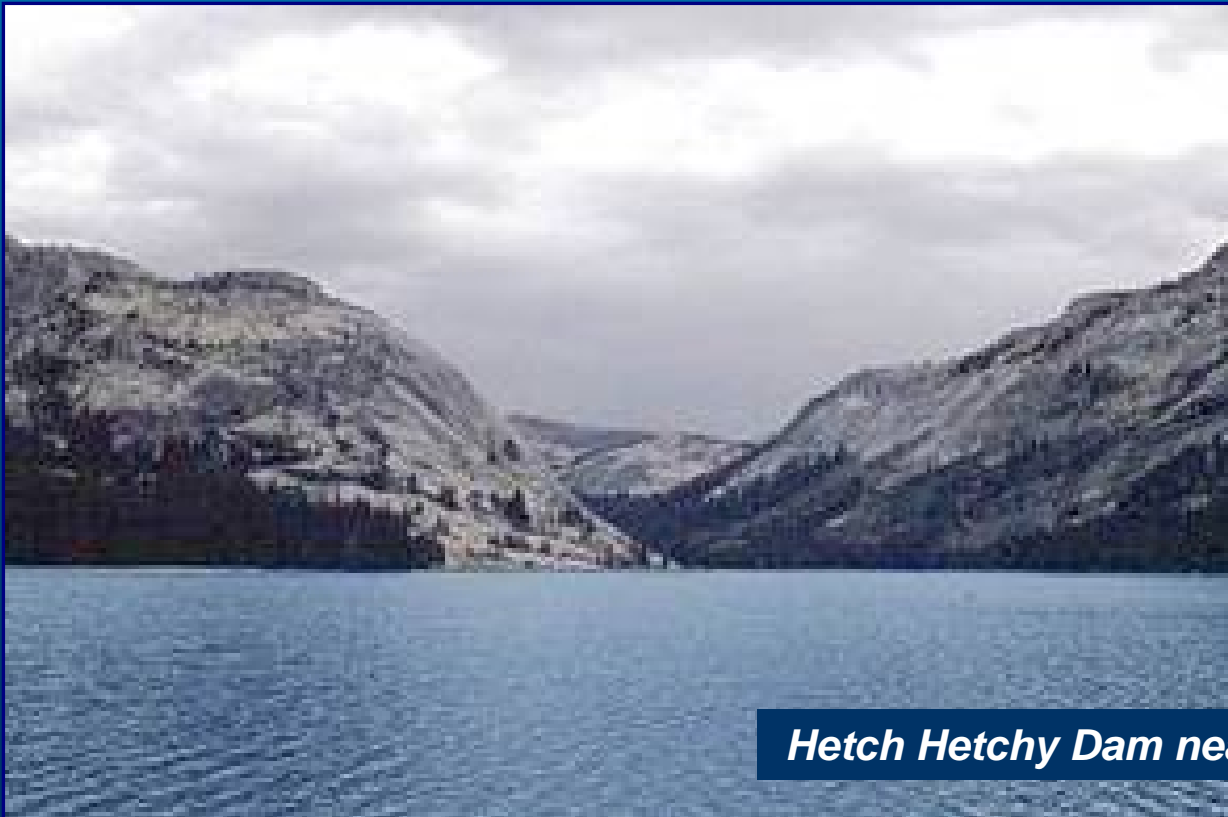


*... to San Luis Reservoir and pumped to valley.*



We tap 3 imported water systems

**3 SFPUC Hetch Hetchy**  
(individual city contracts since 1950s)



*Hetch Hetchy Dam near Yosemite*

# All state & federal water flows through the Delta



Photo courtesy of California Department of Water Resources



# Delta Risks to Water Supply

## Pumping restrictions



## Degraded water quality

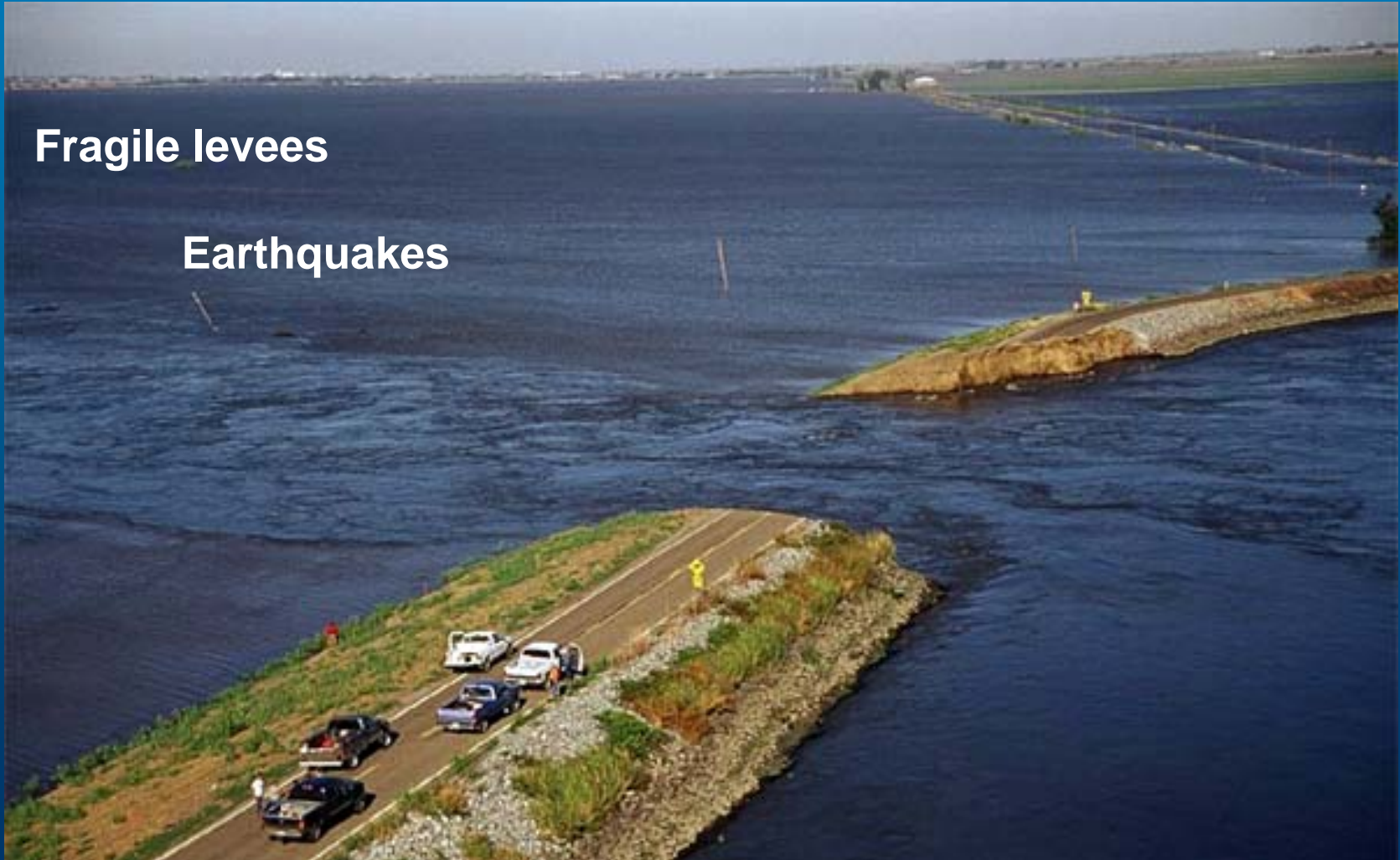
Photos courtesy of US Bureau of Reclamation



# Delta Risks to Water Supply

**Fragile levees**

**Earthquakes**



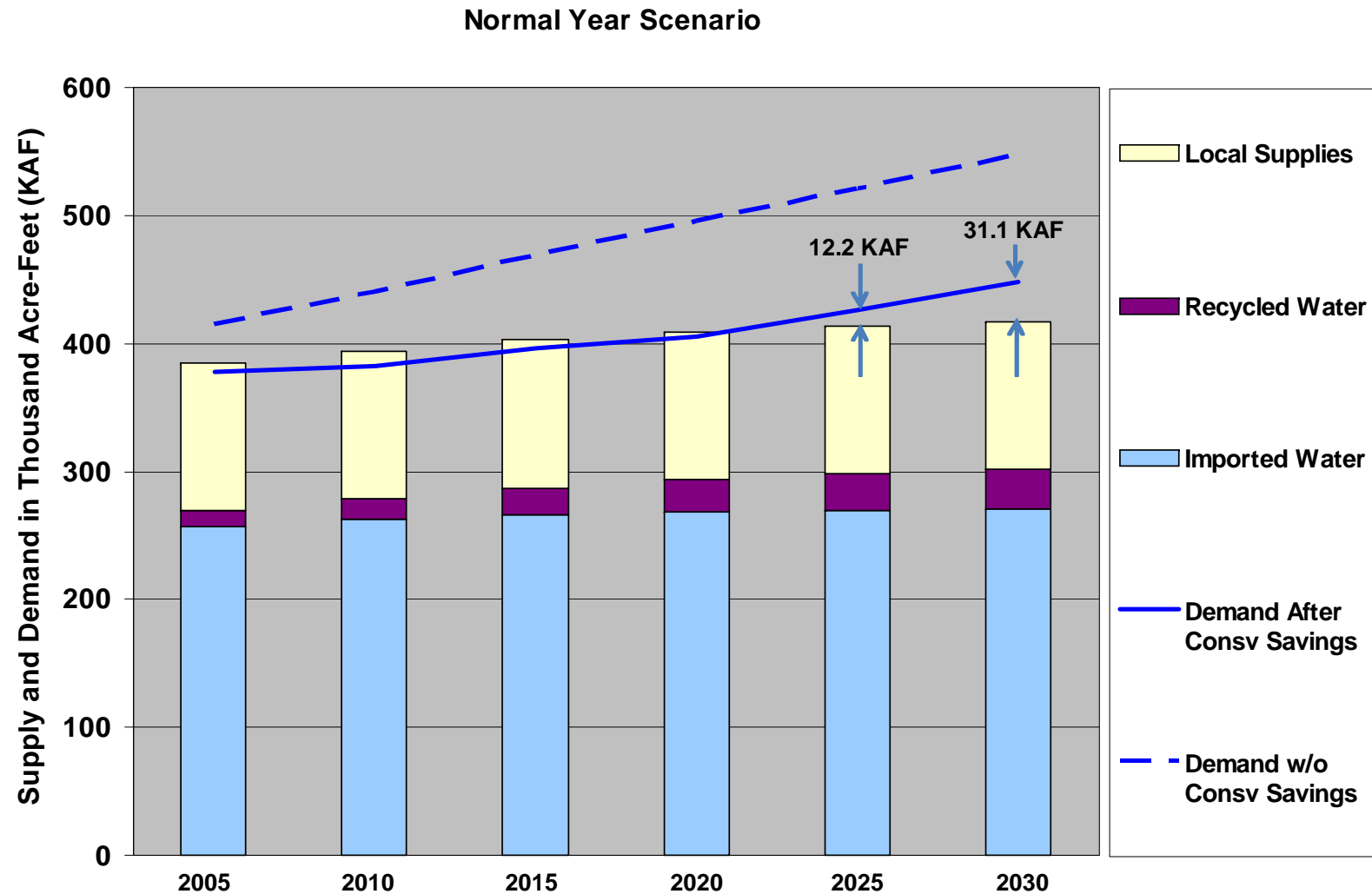
# Delta Risks to Water Supply

Aging  
conveyance  
system



Photos courtesy of US Bureau of Reclamation

# Water Supply Outlook ~ Normal Year





# Climate change ~ potential impacts to water supply



# How do we ensure a reliable long term water supply?

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- **Protect existing supplies and infrastructure (Baseline)**
- **Solve Delta problems**
- **Advocate for a “smarter” water delivery system**
- **Continue investment in local resources**
- **Increase water use efficiency**
- **Advocate for pertinent legislation**
- **Increase regional coordination**

## Issue #2

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# Water Conservation

*Anderson Reservoir in year four of 1987-1992 drought*

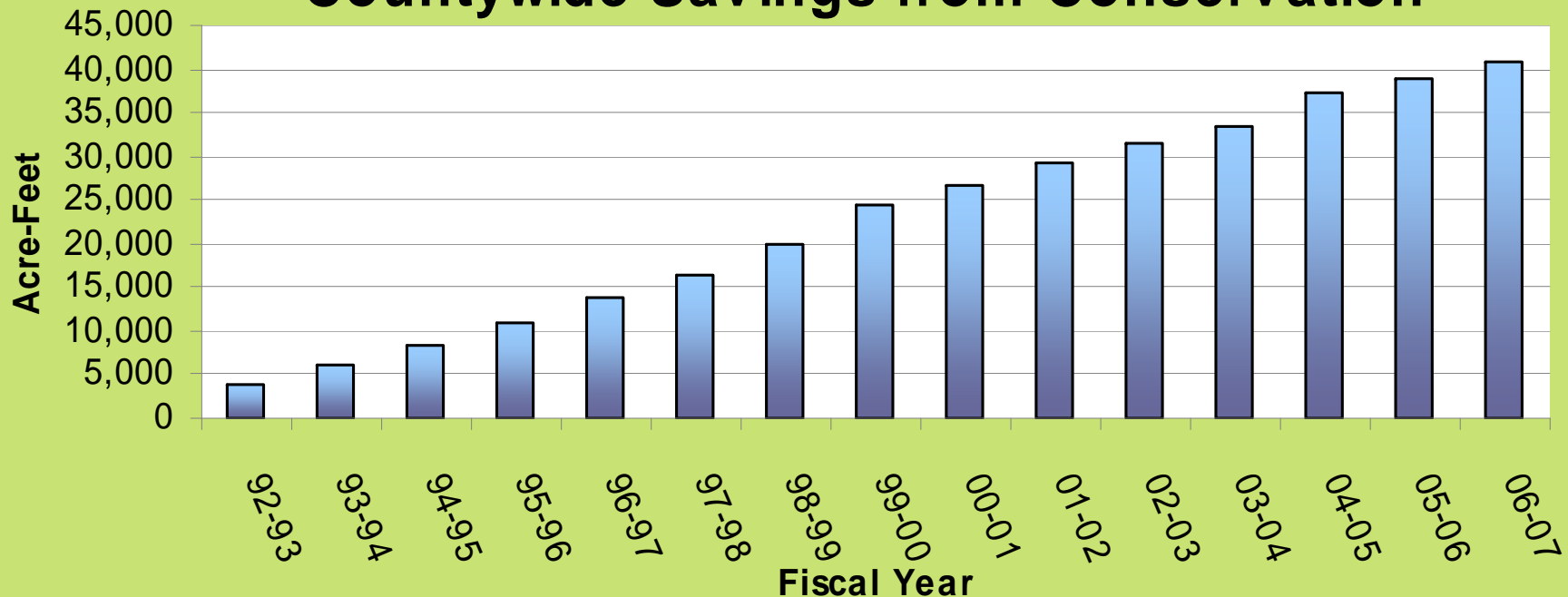


# 2007 Water Conservation

**Countywide: 41,000 acre feet per year**

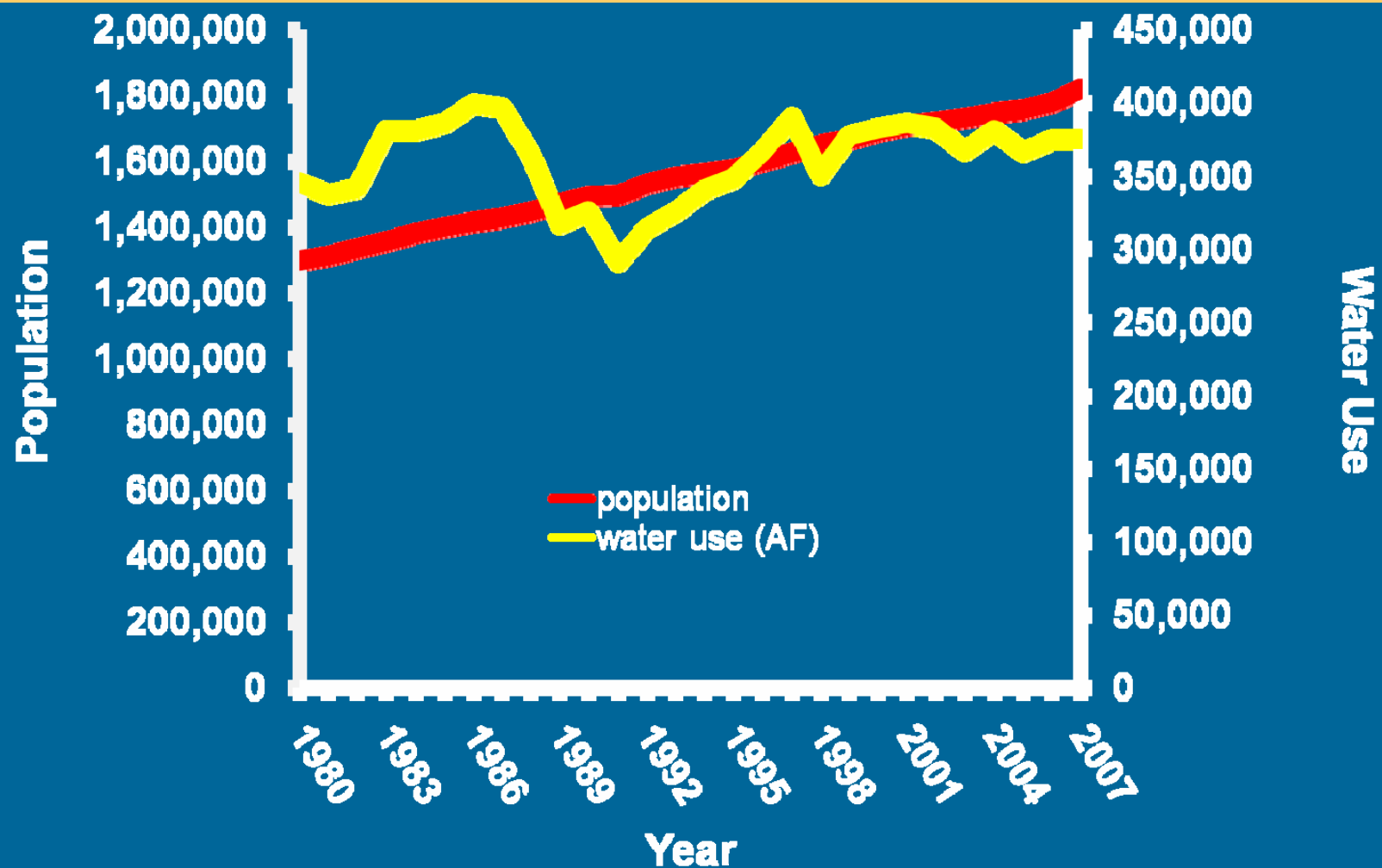
**San José: 20,000 acre feet per year**

## Countywide Savings from Conservation



# Population & Water Use

## Santa Clara County



# Water Conservation Goals

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## Long Term Target (by 2030)

- Conserve 100,000 acre feet per year countywide
- Conserve 50,000 acre feet per year in San José



# Conservation Program Overview

- **10 Residential programs**
- **10 Commercial programs**
- **2 Agricultural programs**



**US EPA Award in 2007**



# Conservation Programs ~ Residential



***Water Wise House Calls***



***Clothes Washer Rebates***



# Priorities to Achieve Our Conservation Goals

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- **Expand outreach/education**
- **Continue existing programs**
- **Support new water efficient technologies**
- **Adopt water efficiency policies and ordinances**
- **Secure funding**



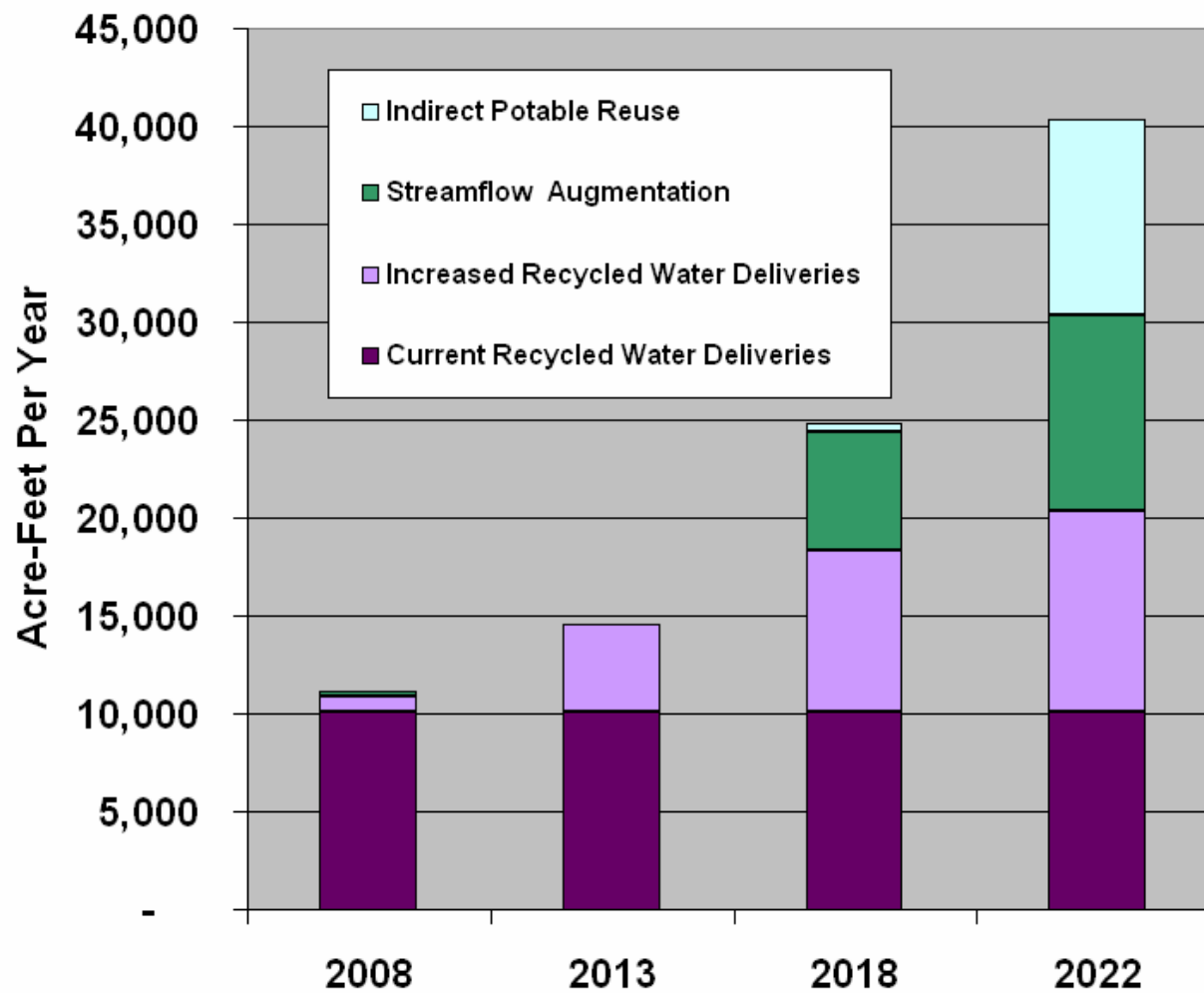
## Issue #3

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Recycled Water

# Components of water reuse goals



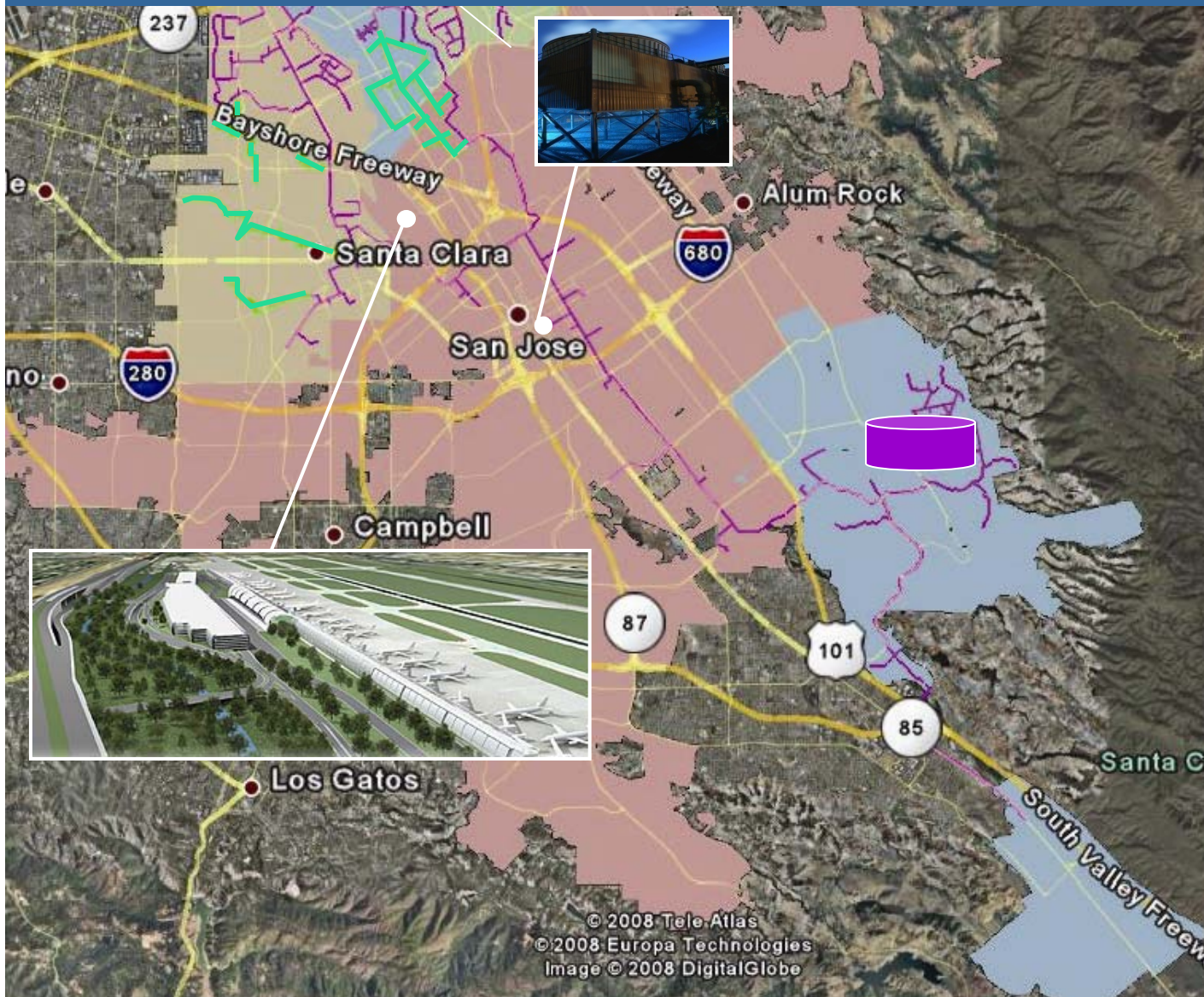
# Overview ~ Current water recycling activities

- South Bay Water Recycling expansion
- Facilities for expanding water reuse
- Community outreach
- Stream flow augmentation study
- Rates, ordinances and fees





# System expansion



## SBWR statistics

- 109 miles of pipeline
- 12 miles of new extensions
- 9.5 MG storage
- 14.4 MGD last two summers
- 10,000 AF/Year delivered in 2007
- 21 billion gallons delivered since 1997





# How to expand the use of recycled water

- Developer funding of pipeline extensions and system improvements
- Dual-plumbing & cooling use for developments
- Set rates to maintain fiscal health and encourage recycled water use

# Key points to consider in Envision San Jose 2040

- **Imported water supplies are becoming less reliable**
- **San José needs to increase water conservation**
- **Recycled water is an effective strategy to reduce our reliance on imported water**